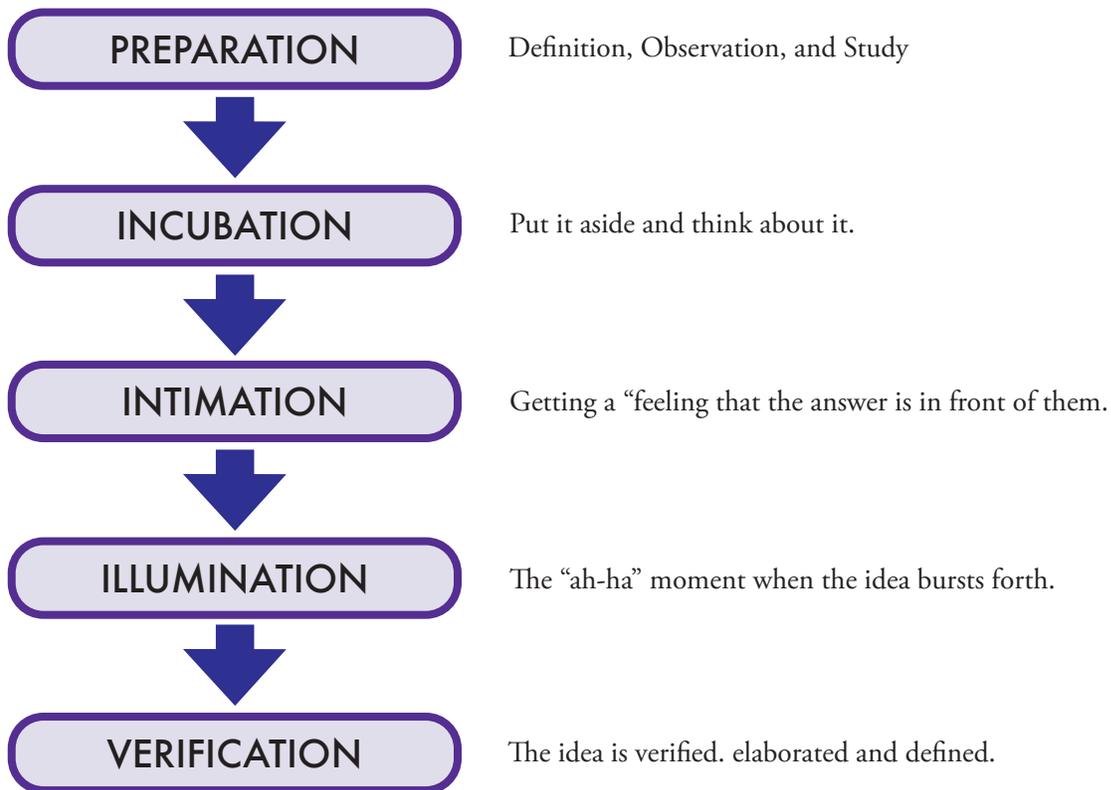


WALLAS' MODEL (1926)

Graham Wallas, in his work *Art of Thought*, published in 1926, presented one of the first models of the creative process. In the Wallas stage model, creative insights and illuminations may be explained by a process consisting of 5 stages:

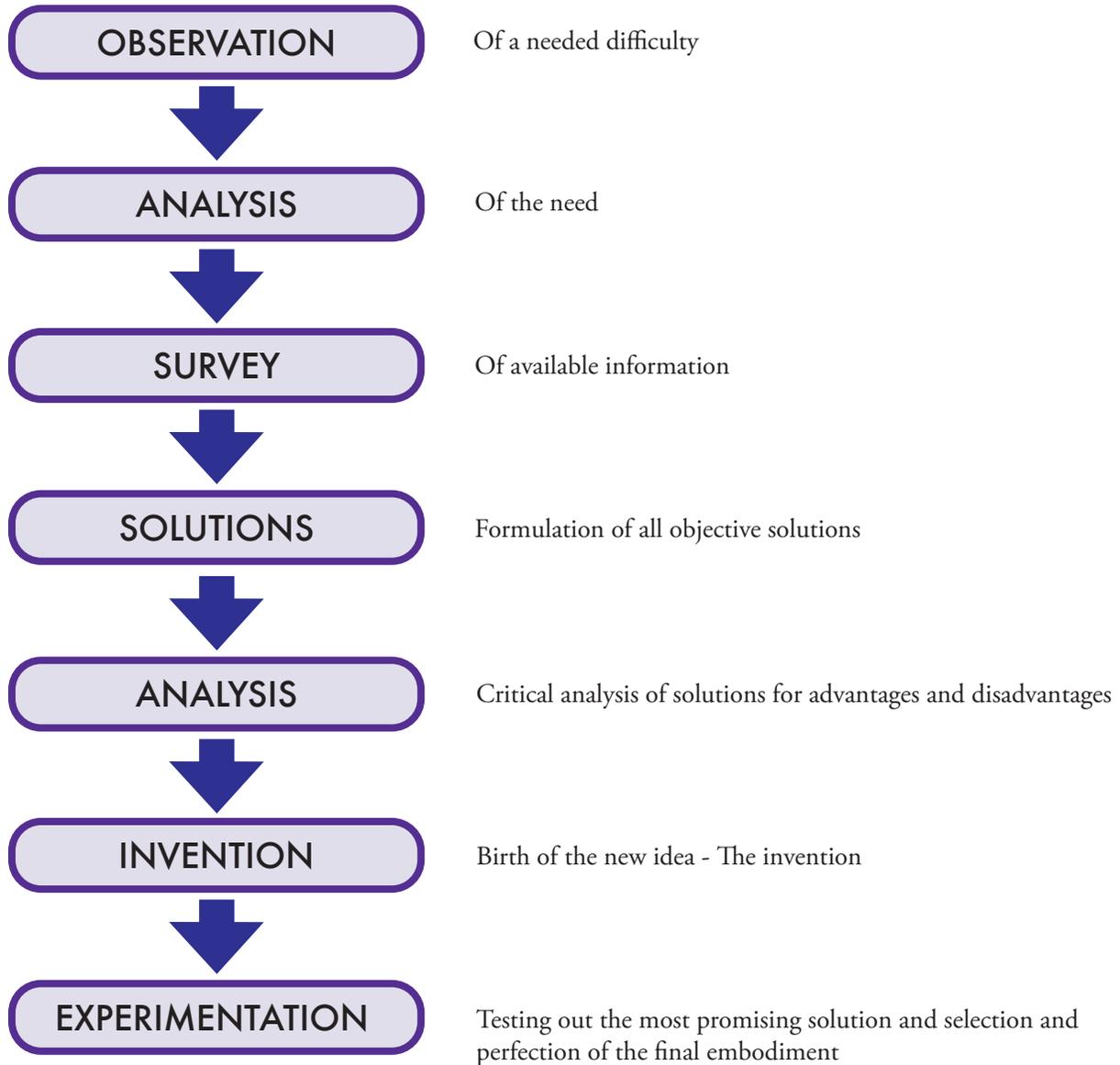


In numerous publications, Wallas' model is just treated as four stages, with "intimation" seen as a sub-stage. There has been some empirical research looking at whether, as the concept of "incubation" in Wallas' model implies, a period of interruption or rest from a problem may aid creative problem-solving. Ward lists various hypotheses that have been advanced to explain why incubation may aid creative problem-solving, and notes how some empirical evidence is consistent with the hypothesis that incubation aids creative problem-solving in that it enables "forgetting" of misleading clues. Absence of incubation may lead the problem solver to become fixated on inappropriate strategies of solving the problem. This work disputes the earlier hypothesis that creative solutions to problems arise mysteriously from the unconscious mind while the conscious mind is occupied on other tasks.

Wallas considered creativity to be a legacy of the evolutionary process, which allowed humans to quickly adapt to rapidly changing environments. Simonton provides an updated perspective on this view in his book, *Origins of genius: Darwinian perspectives on creativity*.

ROSSMAN'S CREATIVITY MODEL (1931)

While some models make it appear that creativity is a somewhat magical process, the predominant models lean more toward the theory that novel ideas emerge from the conscious effort to balance analysis and imagination. For example, Rossman (1931) examined the creative process via questionnaires completed by 710 inventors and expanded Wallas' original four steps to seven.

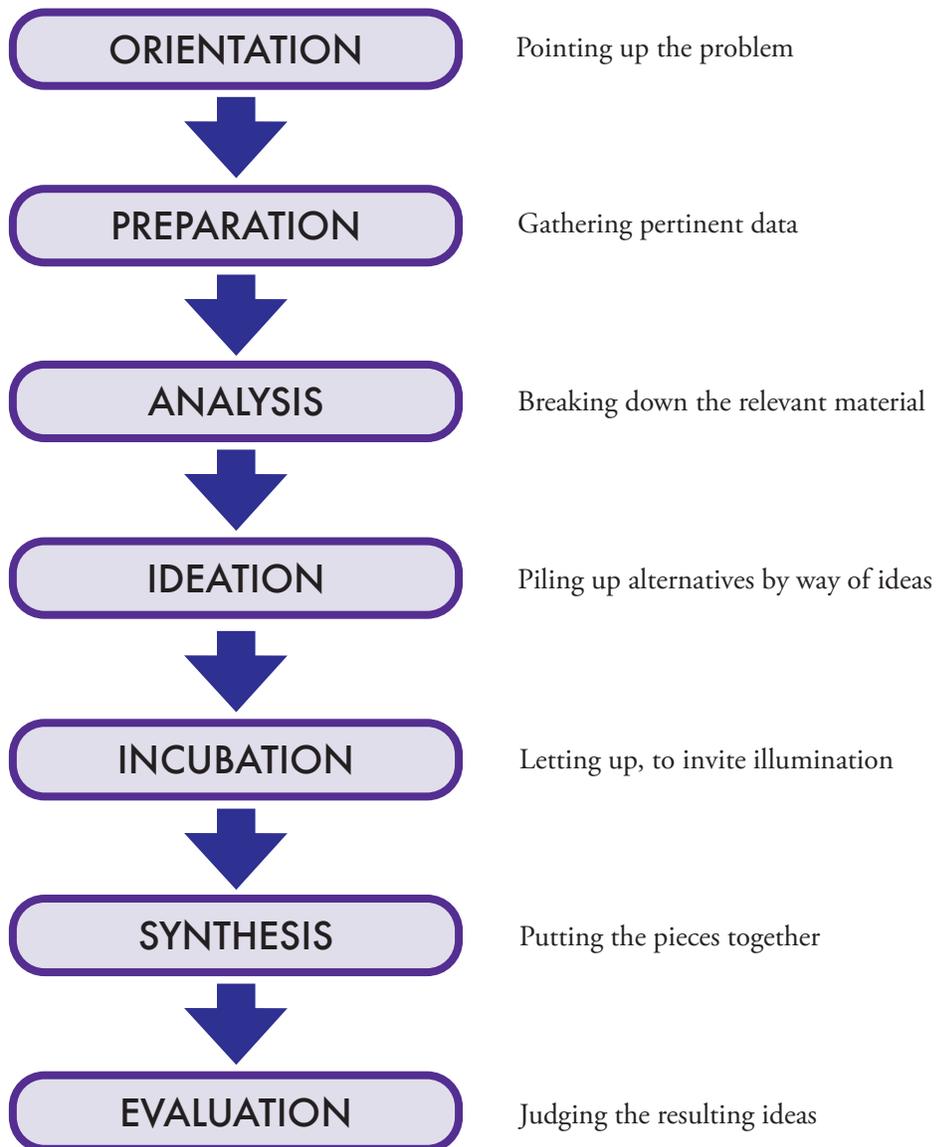


Note that while Rossman still shrouds the "birth of the new idea" in mystery, his steps leading up to and following this moment of illumination are clearly analytical.

Alex Osborn (1953), the developer of brainstorming, embraced a similar theory of balance between analysis and imagination in his seven-step model for creative thinking.

OSBORN'S 7-STEP MODEL FOR CREATIVE THINKING (1953)

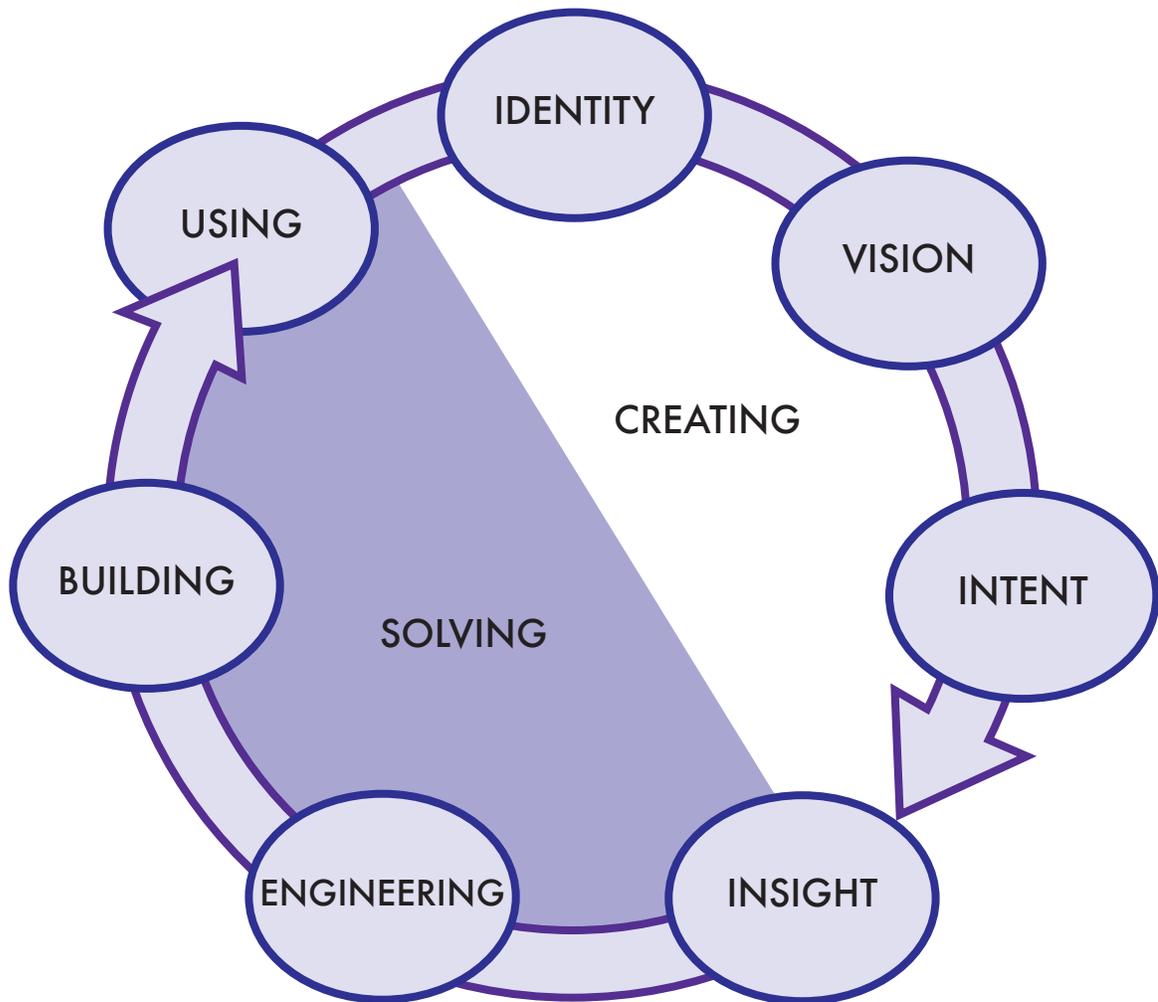
Alex Osborn was one of the founders of BBDO (Batten, Barton, Durstine & Osborn). He is also an author of books on creative thinking.



Note that Osborn implied purposeful ideation both in his notion of "piling up alternatives" and through his development of the rules of brainstorming as a tool for doing so.

MG TAYLOR CORP. MODEL (1979)

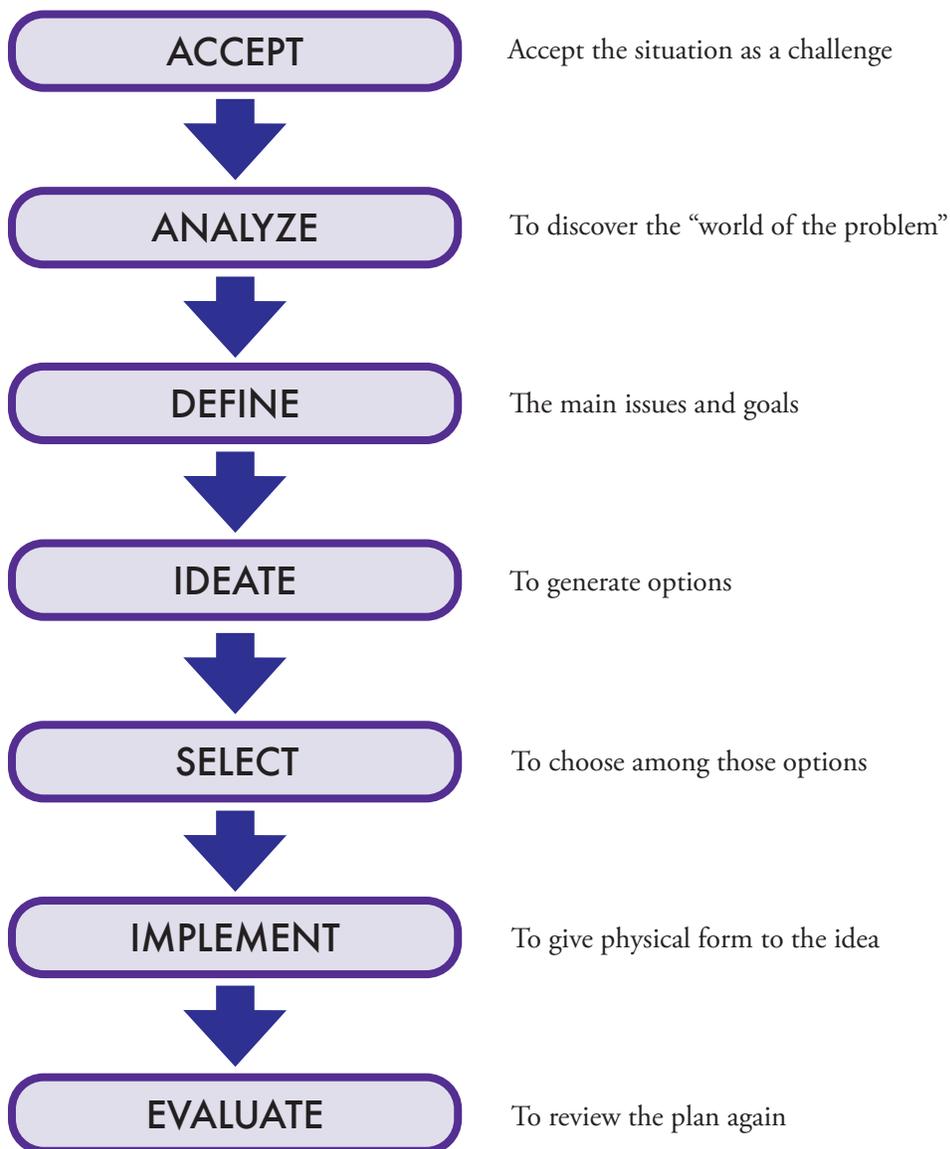
This is a copyrighted process showing a division between subjective and objective (creating and solving). Notice that the Insight phase is split between solving the problem and creating the problem.



Note that the first "half" of the phases are individual and the second half collective.

KORBERG & BAGNALL'S UNIVERSAL TRAVELLER MODEL (1981)

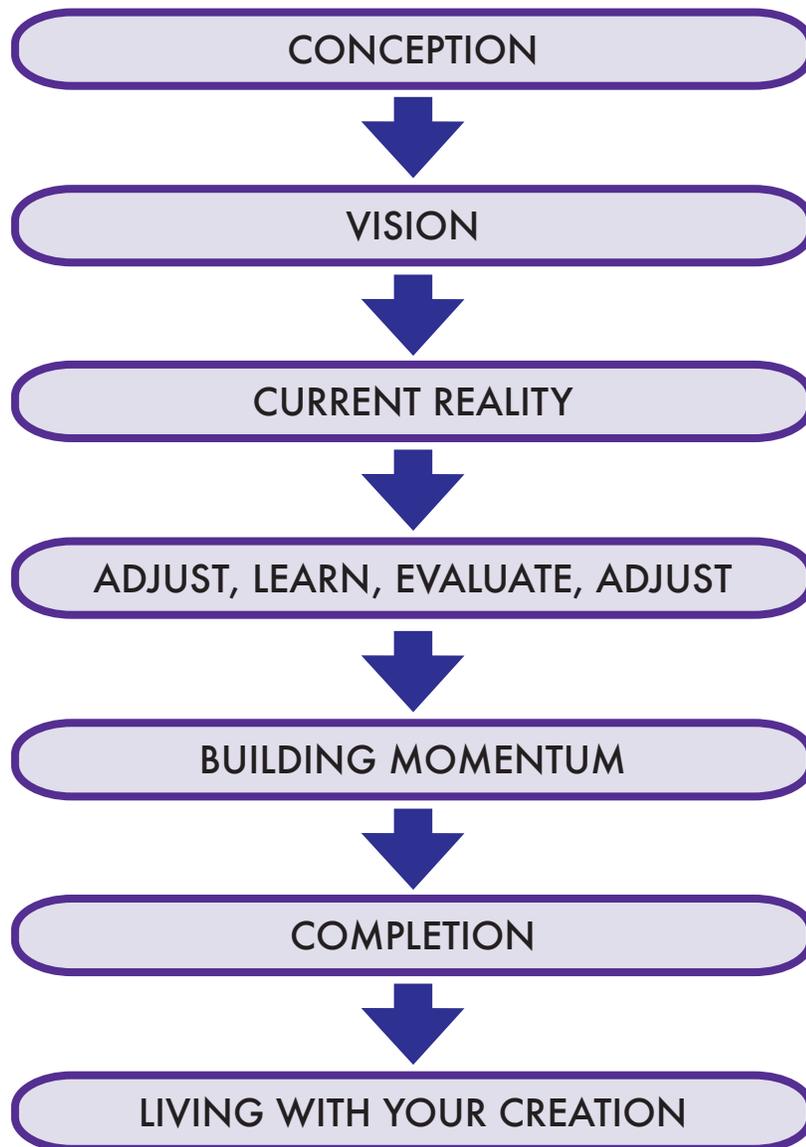
Koberg and Bagnall (1981) propose a similar (To the CPS Model) balanced model in their popular book *The Universal Traveler*.



Again, notice that ideation, the traditional focus of creative thinking tools such as brainstorming, is preceded and followed by deliberate analytical and practical thinking. Also note the importance that Koberg and Bagnall place on accepting the situation as a personal challenge. This is consistent with the research into the lives of great creators that illustrates the importance of focusing and caring deeply.

ROBERT FRITZ'S PROCESS FOR CREATION (1991)

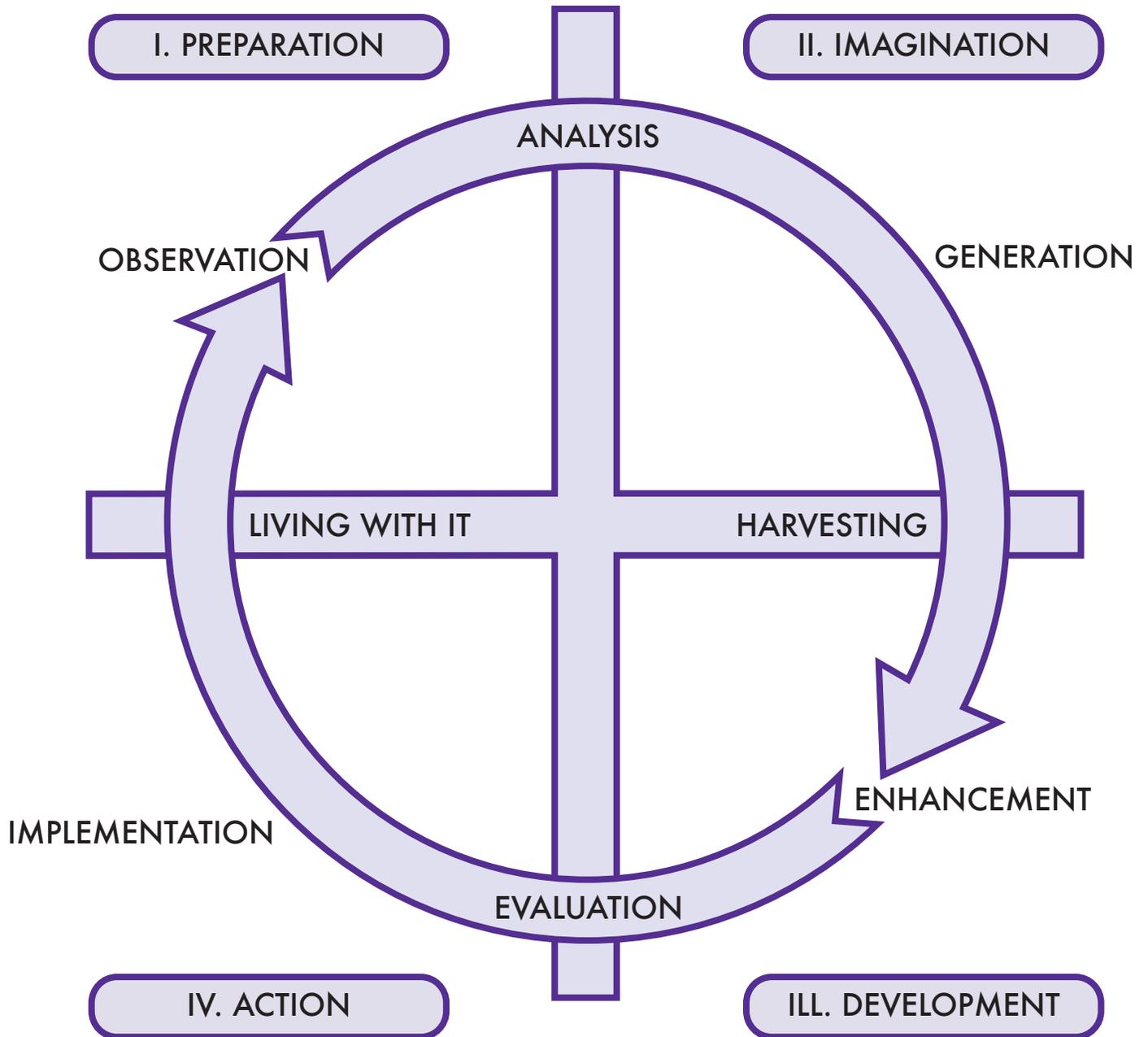
Finally, it is important to note that not all models place the generation of new concepts in the mind as the "meat" of the sandwich between slices of analytical thinking bread.



Fritz identifies the beginning of the process as the creative acts of conception and vision. This is followed by analysis of current reality, action, evaluation, public scrutiny (building momentum), and completion. Fritz also firmly asserts that the creative process is cyclical in nature. "Living with your creation" means purposeful noticing and analysis that leads to the next creative conception and vision.

DIRECTED CREATIVITY MODEL

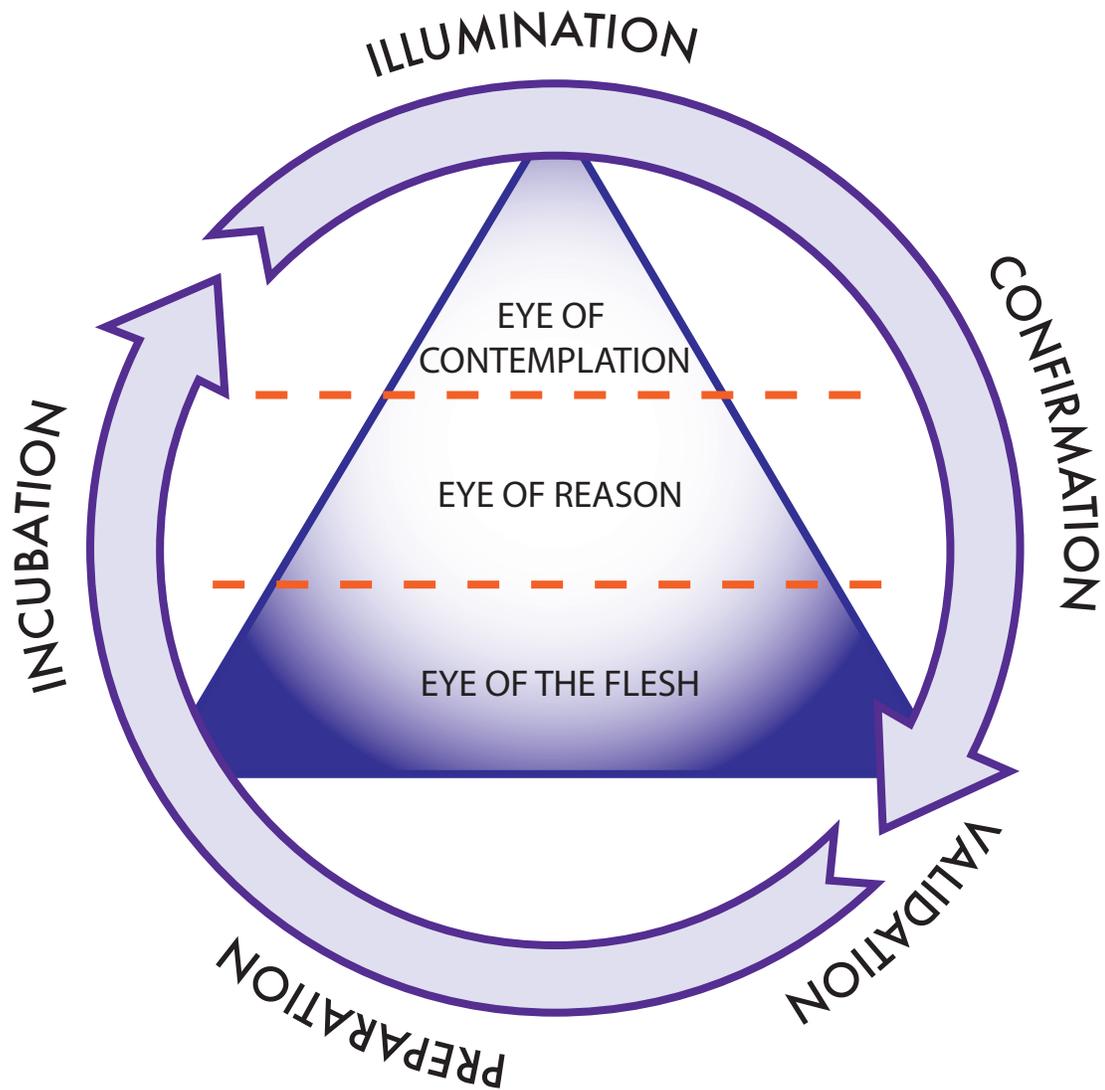
The Directed Creativity Cycle is a synthesis model of creative thinking that combines the concepts behind the various models proposed over the last 80+ years.



Directed creativity simply means that we make purposeful mental movements to avoid the pitfalls associated with our cognitive mechanisms at each step of this process of searching for novel and useful ideas.

THE CYCLE OF CREATIVE CONSCIOUSNESS

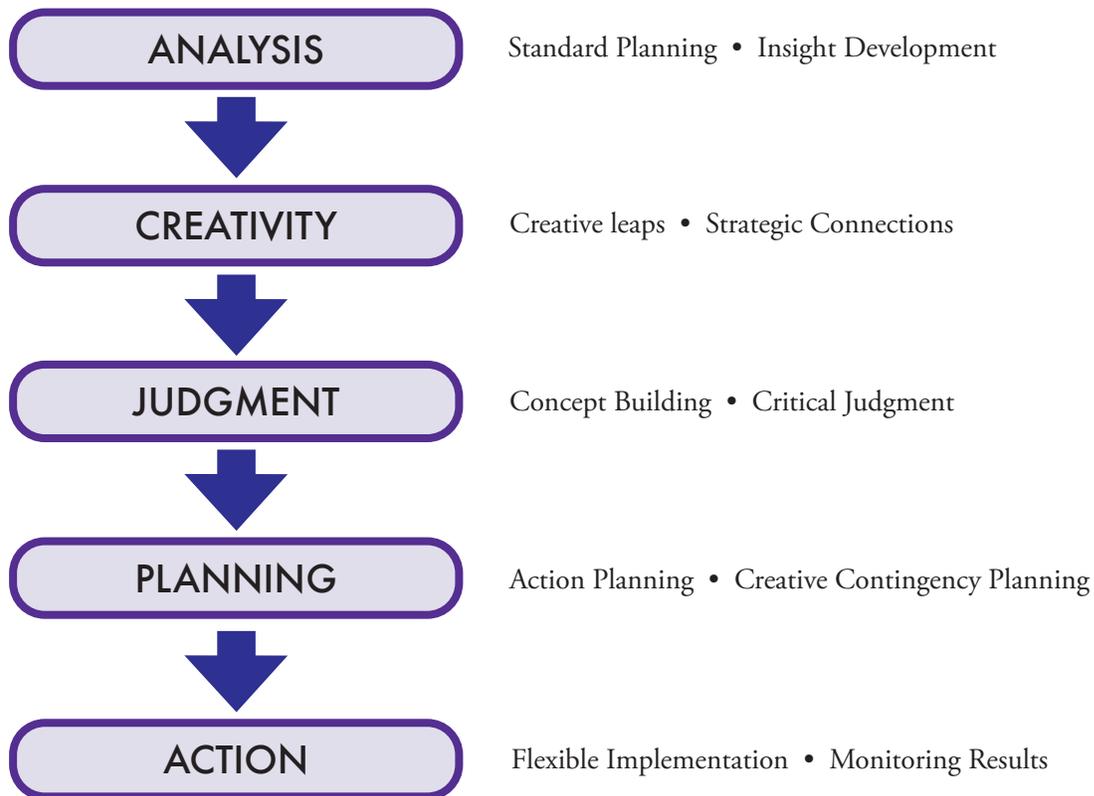
This is taken off of Wallas' linear process and has been transformed into a circular process.



The creative process cycles through three realms of consciousness, as illustrated in the triangle. There are various stages, as illustrated in the circumference of the circle.

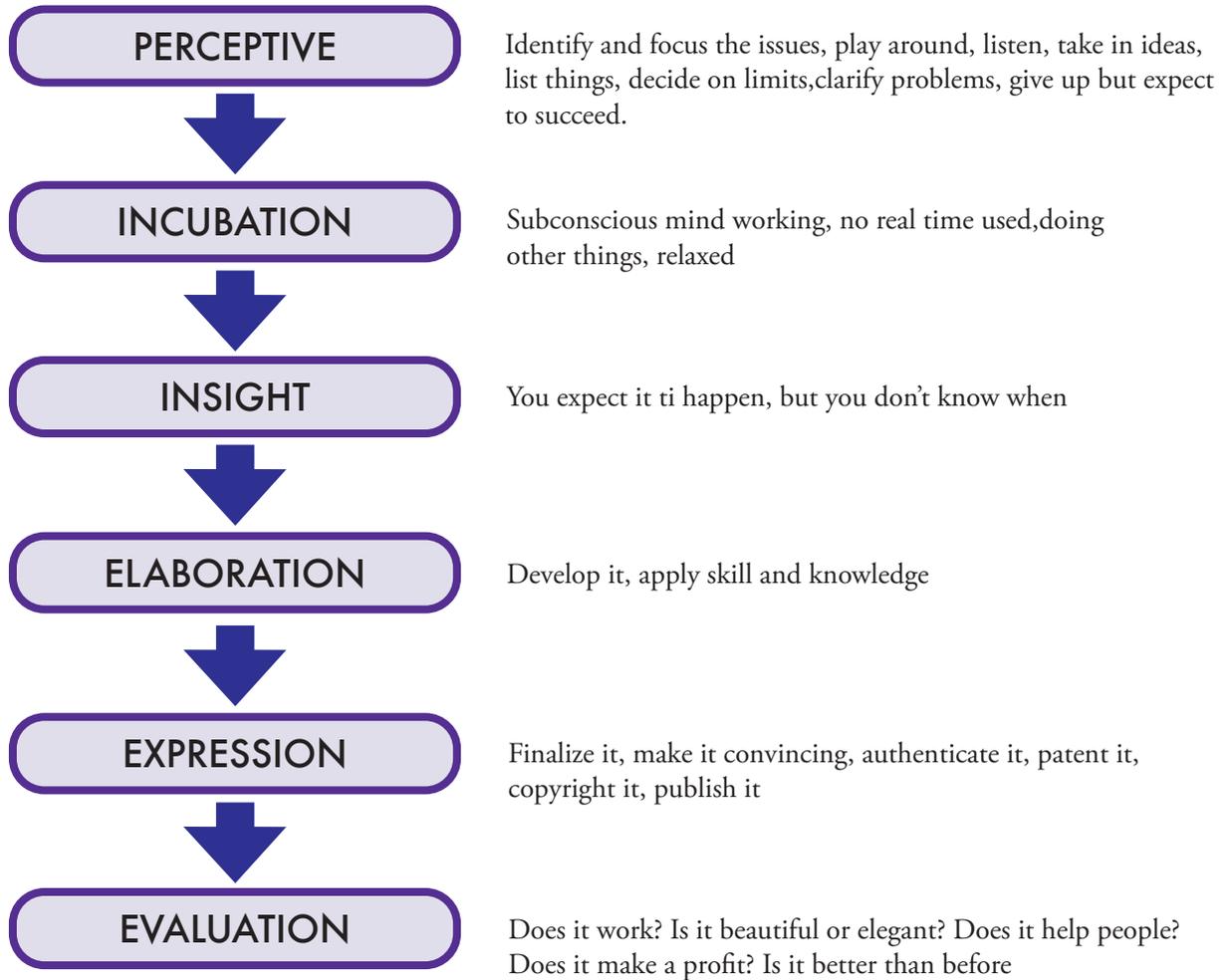
A MODEL FOR CREATIVE STRATEGIC PLANNING

The theme of creative and analytical balance is carried over into models proposed for specific applications. For example, consider Bandrowski's (1985) process for creative strategic planning.



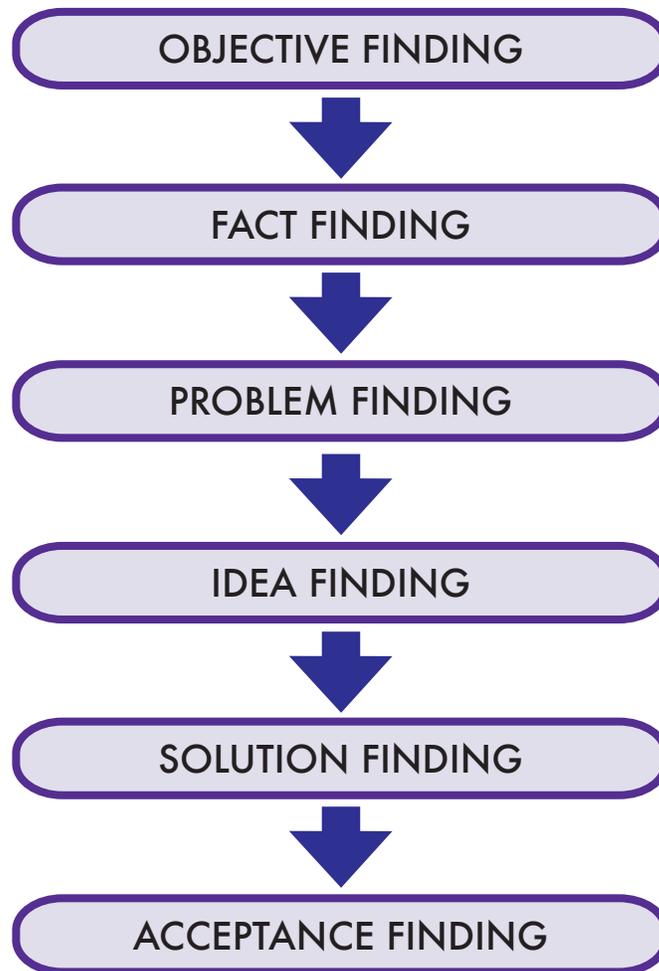
Notice the positive role of judgment in this model and the need for applying specific creative skills in insight development, creative leaps, and creative contingency planning.

COHEN COLLEGE STAGES OF THE CREATIVE ACT



THE CREATIVE PROBLEM SOLVING (CPS) MODEL

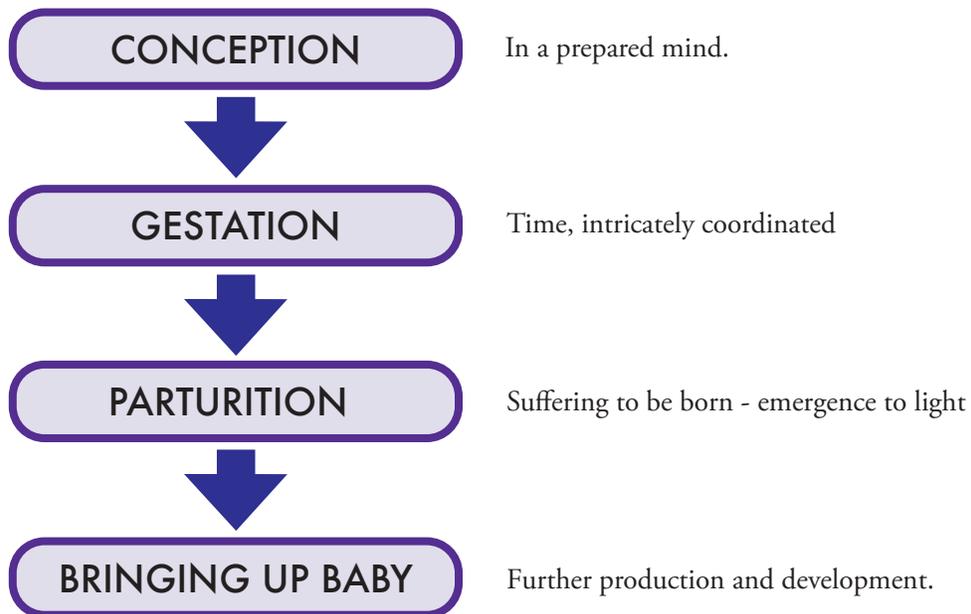
The systematic combination of techniques for directed creativity and techniques for analysis continues as a strong theme in several, more recently proposed models. Parnes (1992) and Isaksen and Trefflinger (1985) outline six steps in their popular creative problem solving (CPS) model. (Tens of thousands of people have learned the CPS model and its associated tools through the seminars conducted by the Creative Education Foundation in Buffalo, NY.)



Steps 3 and 4 (problem and idea finding) clearly require novel, creative thinking; while steps 1, 2, 5, and 6 require traditional skills and analytical thinking.

BARRON'S PSYCHIC CREATION MODEL (1988)

Henri Barron places great emphasis on subconscious and chance processes in his four-phase model:



The tone of Barron's Model supports the popular view of creativity as a mysterious process involving subconscious thoughts beyond the control of the creator.